

REMARKS

Claims 16-38 are currently pending in this application. In the Office Action mailed on September 22, 2005 (“Office Action”), claims 16-38 were rejected. Through this amendment, claims 16, 27 and 33 have been amended. No new matter has been entered. Applicants respectfully request favorable consideration of the present application in light of the amendments to the claims and the following remarks.

Claim Rejections – 35 USC § 103(a) - Mannschedel taken with Futami et al., Shoher et al., and Levy, all in further view of Qin et al. and Furuta et al.

Claims 16-38 were rejected by the Examiner under 35 USC 103(a) as being unpatentable over US Patent No. 6,126,446 to Mannschedel (“Mannschedel”) taken with US Patent No. 4,740,245 to Futami et al. (“Futami”), US Patent No. 5,272,184 to Shoher et al. (“Shoher”), and US Patent No. 6,395,029 to Levy (“Levy”), all in further view of US Patent No. 6,506,333 to Qin et al. (“Qin”) and US Patent No. 5,182,151 to Furuta et al. (“Furuta”). Applicants respectfully traverse this rejection as set forth below.

To establish a *prima facie* case of obviousness under 35 USC § 103(a) in view of a reference or combination of references, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference(s) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Finally, in determining the differences between the prior art and the claims, the question under 35 USC § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.

Independent claim 16, as amended, discloses a method of performing a medical procedure, comprising the steps of: (a) selecting a thermopolymer matrix from a group consisting of gutta percha, balata and polyisoprene, or any mixture thereof; (b) selecting a dispersion compound comprising at least one of titanium and gold; (c) combining the thermopolymer matrix and the dispersion compound to form a thermopolymer composition; (d) sterilizing the thermopolymer composition; and (e) performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment by heating the sterilized thermopolymer composition to a flowable form and injecting the flowable thermopolymer composition into a respective region of a living body.

Independent claim 27, as amended, discloses a method of performing a medical procedure, comprising the steps of: (a) providing a thermopolymer composition, the thermopolymer composition comprising a combination of a thermopolymer matrix selected from a group consisting of gutta percha, balata and polyisoprene, or any mixture thereof, and a dispersion compound comprising at least one of titanium and gold; (b) sterilizing the thermopolymer composition; and (c) performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment by heating the sterilized thermopolymer composition to a flowable form and injecting the flowable thermopolymer composition into a respective region of a living body.

Independent claim 33, as amended, recites a method of performing a medical procedure, comprising the steps of: (a) combining gutta percha with gold to form a thermopolymer composition; (b) sterilizing the thermopolymer composition; and (c) performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment by heating the sterilized thermopolymer composition to a flowable form and injecting the flowable thermopolymer composition into a respective region of a living body.

None of the Mannschedel, Futami, Shoher, Levy, Qin or Furuta references, alone or in combination, appear to disclose or suggest all of the features of amended claims 16, 27 and 33.

Among other voids, these references appear to be completely silent regarding the essential step (present in each independent claim as amended) of “*performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment by heating said sterilized thermopolymer composition to a flowable form and injecting said flowable thermopolymer composition into a respective region of a living body.*”

Each of Mannschedel, Futami and Shoher teach compositions for use in dentistry, and as a result do not address, disclose or suggest a step of performing at least one of *disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment*. Each of Levy, Qin and Furuta, though not concerned with dentistry but relied upon by the Examiner as piecemeal sources of different elements of the applicants’ claimed invention, similarly fail to teach performing at least one of *disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment*. Consequently, there is nothing in any of the above-cited references (alone or in combination) that suggests a step of performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment. Similarly, there is no motivation in any of Mannschedel, Futami, Shoher, Levy, Qin or Furuta, alone or in combination, to use a thermopolymer composition containing gutta percha in performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment. Until the applicant’s invention, compositions containing gutta percha had not been used in non-dental applications. “The fact that a prior art device could be modified so as to produce the claimed device is not a basis for an obviousness rejection unless the prior art suggested the desirability of such a modification.” *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). Since gutta percha compounds had not been used in non-dental applications prior to the applicants’ invention, the use of gutta percha compounds in performing at least one of disc nucleus replacement, vertebroplasty, reconstructive facial surgery, breast augmentation and urinary incontinence treatment would not have been obvious to one of ordinary skill in the art at the time the invention was made.

PATENT

Application Serial No. 10/849,756

Attorney Ref. No. 034US2

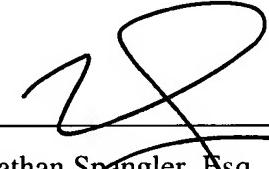
Based on the foregoing, Applicants respectfully submit that the Mannschedel, Futami, Shoher, Levy, Qin and Furuta references, whether taken alone or in combination, fail to contain the requisite teaching or suggestion that would have lead one of ordinary skill in the art to the present invention as set forth in amended claims 16, 27 and 33. Therefore, it is respectfully requested that the rejection on page 3 of the Office Action be withdrawn. Claims 16, 27 and 33 are believed to be in proper condition for allowance and an indication of such is hereby respectfully requested.

Claims 17-26, being dependent upon and further limiting independent claim 16, should be allowable for the reasons set forth in support of the allowability of claim 16, as well as the additional limitations they contain. Similarly, claims 28-32 and 34-38, being dependent upon and further limiting independent claims 27 and 33, respectively, should be allowable for the reasons set forth in support of the allowability of claims 27 and 33, as well as the additional limitations they contain.

CONCLUSION

The foregoing amendment has been submitted to place the present application in condition for allowance. Favorable consideration and allowance of the claims in this application is respectfully requested. In the event that there are any questions concerning this Amendment or the application in general, the Examiner is cordially invited to telephone the undersigned attorney so that prosecution may be expedited.

Respectfully submitted,
NUVASIVE, INC.

By: 

Jonathan Spangler, Esq.
Registration No. 40,182

4545 Towne Centre Court
San Diego, CA 92121
Tel.: (858) 243-0029

March 22, 2006